



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Jean-Marc FRANCES et al.

Application No.: 10/009,605

Filed: MARCH 20, 2002

For: METHOD FOR PRODUCING A
SEALED RELEASE COATING
APPLIED ON A CYLINDER HEAD
GASKET USING A SILICONE
MATERIAL

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) Group Art Unit: 1711
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) Examiner: Susan W. Berman
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) Confirmation No.: 4221
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DECLARATION BY INVENTOR UNDER 37 C.F.R. § 1.132

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Jean-Marc FRANCES, hereby state as follows:

1. I was awarded a doctor - engineer in chemistry from the Paul-Sabatier University, Toulouse (France) in 1983.

2. Currently, I am a chemical R & D engineer, Silicone Dpt in the at RHODIA / RHODIA Recherches Lyon France.

3. My curriculum vitae, research experience and list of publications are attached hereto as Appendix I.

4. I am aware that the Examiner in the above-identified application has concluded that the claimed invention is unpatentable over FR 2757870 in view of EP 0522703. In view of the experimental data presented below, I respectfully disagree with the Examiner's conclusion.

5. I supervised/conducted comparative tests to demonstrate that the unexpected and surprisingly superior properties of products made using the claimed process would not be achieved by conventional coating processes such as that described in FR N807. The following comparative tests were conducted in accordance with Example 2 described at page 52 of the specification. Specifically, 30 g/m² of the same formula used in Example 2 with a different weight ratio component C (1,4-cyclohexanedimethanol divinyl ether, equal to

reactive diluent C) was applied in the same way as in Example 2 and compared with a coating which was applied with 0 weight percent of component C. The combined properties measured are collated in the following table:

	Test 1 Comparative	Test 2 Invention	Test 3 (Ref) Invention
% Weight Ratio of Component C	0	10	20
Thickness	30 Φ m	30 Φ m	30 Φ m
Color	Black	Black	Black
Crosslinking Conditions	UV crosslinking	UV crosslinking	UV crosslinking
Max. Rate	10 m/min	10 m/min	10 m/min
MEK (methyl ethyl ketone) (1) solvent resistance expressed as a ratio: Test 1/Test 3	0.16	0.7	1
Scratch Test (4) expressed as a ratio: Test 1/Test 3	0.5	0.8	1


The above test data shows that a 6.25-fold improvement in solvent resistance (i.e., MEK (methyl ethyl ketone)) was observed and a 2-fold improvement in scratch resistance was observed in the products made using the process of the present invention as compared to the comparative product made without any of component C.

6. I submit that these improvements in solvent resistance and scratch resistance are both unexpected and surprising. On the basis of these surprising and unexpected advantages, I submit that the claimed process would not have been obvious over the asserted combination of FR N870 and EP N703.

7. I HEREBY DECLARE that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of

Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: April 22nd 2004

Jean-Marc FRANCES 
Jean-Marc FRANCES
(insert name of declarant)

APPENDIX I

(Curriculum Vitae, Research Experience and List of Publications)